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| APPLICATION NO.       | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/812,914            | 03/31/2004  | Paer von Malmberg    | 030481-0215         | 5696             |
| 22428                 | 7590        | 11/10/2009           |                     |                  |
| FOLEY AND LARDNER LLP |             |                      | EXAMINER            |                  |
| SUITE 500             |             |                      | FOREMAN, JONATHAN M |                  |
| 3000 K STREET NW      |             |                      | ART UNIT            |                  |
| WASHINGTON, DC 20007  |             |                      | PAPER NUMBER        |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/812,914

**Applicant(s)**

VON MALMBORG ET AL.

**Examiner**

JONATHAN ML FOREMAN

**Art Unit**

3736

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 and 17 is/are allowed.
- 6) ☒ Claim(s) 1-15 and 18-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/13/09 has been entered.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 18 – 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,938,624 to Akerfeldt et al.

In regard to claims 18 – 20, Akerfeldt et al. disclose a male connector for a guide wire (Figure 6), the male connector comprising a core wire (1), a plurality of conductive members (5) spaced apart longitudinally along said core wire, and a plurality of conductors (7) disposed along the core wire, the conductors being connected to a respective conductive member, wherein at least one of the conductors passes by, immediately before connecting to the respective connected conductive member, a portion of the connector that has a greater stiffness than the stiffness of an entire portion of the connector between the plurality of conductive members; a greater stiffness than a stiffness of an extra continuous outer insulating material between the plurality of conductive members; and a greater stiffness than a portion of the connector between the respective connected conductive

member and the extra continuous outer insulating material in that at least one of the conductors (7) passes through a conductive member (5) before connecting to a respective conductive member. An insulator material (9) fixates the respective conductors inside the respective conductive members (Col. 5, lines 4 - 8). It is noted that immediate does not necessarily mean adjacent but can be reasonably interpreted as near (See [www.answers.com/immediate](http://www.answers.com/immediate)).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 - 15 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,938,624 to Akerfeldt et al. in view of U.S. Patent No. 5,374,285 to Vaiani et al.

In regard to claims 1 – 15, Akerfeldt et al. disclose a male connector for a guide wire, the male connector comprising a core wire (1), a plurality of conductive members (5) spaced apart longitudinally along said core wire, a plurality of conductors (7) disposed along the core wire, the conductors being connected to a respective conductive member. The male connector includes insulator material (9) that aids in supporting the respective conductors (Col. 5, lines 4 – 8). However, Akerfeldt et al. fails to disclose at least one conductor extends from beyond a distal end of a respective connected conductive member towards a proximal end of the respective connected conductive member along at least a substantial portion of the respective connected conductive member, wherein the at least one conductor extending from beyond the distal end of the respective connected conductive member towards the proximal end of the respective connected conductive

member extends in a loop beyond the proximal end of the conductive member before extending back towards the distal end of the respective connected conductive member. Vaiani et al. disclose an elongate medical device having at least one conductive member (5) and at least one conductor (2) extending from beyond a first end of the respective connected conductive member towards the second end of the respective connected conductive member in a retrograde loop which extends beyond the second end of the conductive member before extending back towards the first end of the respective connected conductive member and being connected to the first end (Col. 3, lines 60 – 68). The conductor extends through the entire respective connected conductive member (Figure 3). The conductor is not connected to the respective connected conductive member at the first end (Figure 3). The conductor does not contact the respective connected conductive member until after passing the first end (Figure 3 and 4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connection of the at least one conductor disclosed by Akerfeldt et al. to extend from beyond the distal end of the respective connected conductive member towards the proximal end of the respective connected conductive member in a retrograde loop which extends beyond the proximal end of the conductive member before extending back towards the distal end of the respective connected conductive member in a manner taught by Vaiani et al. in order to anchor the conductor to the best possible effect (Col. 3, lines 65 - 68).

In regard to claim 21, Akerfeldt et al. disclose a male connector for a guide wire (Figure 6), the male connector comprising a core wire (1), a plurality of conductive members (5) spaced apart longitudinally along said core wire, and a plurality of conductors (7) disposed along the core wire, the conductors being connected to a respective conductive member. An insulator material (9) fixates the respective conductors inside the respective conductive members (Col. 5, lines 4 - 8).

Akerfeldt et al. fail to disclose at least one of the conductors passing by, immediately before connecting to the respective connected conductive member, a portion of the connector that has a greater relative stiffness than a portion of the connector immediately past the proximal and distal ends of the respective conductive member. Vaiani et al. disclose an elongate medical device having at least one conductive member (5) and at least one conductor (2) extending from beyond a first end of the respective connected conductive member towards the second end of the respective connected conductive member in a retrograde loop which extends beyond the second end of the conductive member before extending back towards the first end of the respective connected conductive member and being connected to the first end (Col. 3, lines 60 – 68). In such a configuration, the conductor passes through a portion (within or on top of the conductive member (5)) of the medical device having a greater relative stiffness than a portion past the proximal and distal ends of the conductive member (5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connection of the at least one conductor disclosed by Akerfeldt et al. to extend from beyond the distal end of the respective connected conductive member towards the proximal end of the respective connected conductive member in a retrograde loop which extends beyond the proximal end of the conductive member before extending back towards the distal end of the respective connected conductive member in a manner taught by Vaiani et al., and thus pass through a portion having a greater relative stiffness, in order to anchor the conductor to the best possible effect (Col. 3, lines 65 - 68).

#### ***Response to Arguments***

6. Applicant's arguments filed 8/13/09 have been fully considered but they are not persuasive. Akerfeldt et al. disclose an insulating material (9) that fixates the conductors inside the conductive members (Col. 5, lines 4 - 8). It is noted that the amendments to the claims, aside from the

amendments to claim 16, do not exclude a portion of the conductors from being positioned on the outside or connected to the outside of a respective conductive member as in the case with Vaiani et al.

***Allowable Subject Matter***

7. Claims 16 and 17 are allowed. The prior art fails to disclose or fairly suggest at least one conductor extending in a retrograde loop outside of a respective connected conductive member before connecting to the inside of the conductive member.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN ML FOREMAN whose telephone number is (571)272-4724. The examiner can normally be reached on Monday - Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571)272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jonathan ML Foreman/  
Examiner, Art Unit 3736